

NOTES AND DESCRIPTIONS OF NEARCTIC MEGACHILE  
(Hymenoptera, Megachilidae)<sup>1</sup>

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Since the publication of the several parts of the Revision of the Genus *Megachile* in the Nearctic Region<sup>2</sup>, a considerable number of collections of these bees have been received from several institutions and individuals for determination. The limitations of space make it difficult to publish all of the records that have accumulated through the study of this material, but some apparently new species which have been discovered are in need of description, and there are some remarks of significance to be made about a number of previously known species.

## MEGACHILE (ANTHEMOIS) NIVALIS Friese

Evidence has accumulated which seems to indicate that *nivalis* is very closely related to *M. relativa* Cresson, and may possibly represent a race of that species. Several males have come to hand which have been collected along with females of *nivalis*, although no instances of pairs *in copula* have been noted. These males are so nearly identical with the males of *relativa* that no satisfactory means of separating them has been found. Moreover, there is some variability in the females of *nivalis* in the extent of black hairs in the scopa. Typically the scopa is entirely black on the fifth and sixth sterna, but several specimens have been examined in which that on the fifth segment is considerably paler in color, or with the more basal hairs pale. In all specimens, however, the sixth tergum is entirely fuscous pubescent, in marked contrast to the golden tomentum of *relativa*, and the average size of *nivalis* exceeds considerably that of *relativa*. It remains to be proven that these males that have been associated with *nivalis* are actually that species.

In addition to records of females from ALASKA, ALBERTA, MAINE, MANITOBA, MONTANA, ONTARIO, OREGON and WYOMING,

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<sup>2</sup> Trans. Am. Ent. Soc. LIX, pp. 295-361 (1934); LXI, pp. 1-44, 155-205 (1935); LXII, pp. 117-166, 323-382 (1936, 1937); LXIII, pp. 45-83, 175-206, 381-426 (1937).



May 2 and 31, 1937 (E. C. Van Dyke). NEVADA: 1 ♀, INDIAN SPRINGS, CLARK COUNTY, May 26, 1940 (Reeves, Cazier & Ting). NEW MEXICO: 1 ♂, ALBUQUERQUE, August, 1894 (Snow).

MEGACHILE (XEROMEGACHILE) SUBNIGRA var. ANGELICA Mitchell

It now seems probable that *M. blaisdelli* Mitchell is the female of *angelica*, and that this species represents a color variant of *M. subnigra* Cresson rather than a distinct species. The male (*angelica*) differs from *subnigra* chiefly in the pale pubescence of the legs and the presence of white apical fasciae on the abdomen. In *subnigra* the fasciae are lacking and the legs are black pubescent. Likewise the female (*blaisdelli*) is conspicuously white fasciate, while the female of *subnigra* is not, and no other constant differences have been found.

Megachile (Xeromegachile) inyoensis Mitchell, new species

In the key to females of *Xeromegachile* (Trans. Am. Ent. Soc. LXII, 1936, p. 326) this specimen runs to *M. hilata* or *redlandica*, but differs from both in the puncturation of the clypeus and in the lack of dark pubescence on the disc of the second abdominal tergum.

Female. Size: Length, 10.5 mm.; breadth of abdomen, 4 mm.; anterior wing, 7.5 mm.

Structure: Length and breadth of face subequal; eyes subparallel; clypeal margin straight; mandible 4-dentate; second joint of flagellum subequal to pedicel, the first joint longer; lateral ocelli very slightly nearer edge of vertex than to eyes; margin of vertex incurved; cheeks below broader than eyes, narrowed above; mid and hind metatarsi distinctly shorter and narrower than their tibiae; apical margins of segments 2-5 of abdomen distinctly though not deeply depressed; sixth tergum straight, with very short erect hairs visible in profile.

Puncturation: Minute and crowded at sides of clypeus and face, more distinct and relatively coarse in center of clypeus, the intervening spaces between punctures dull; fine and indistinct on the shining cheeks; deeper and more distinct, but fine and close on vertex medially, slightly more coarse and sparse laterally; fine and close on pleura above and on mesonotum and scutellum laterally, becoming more coarse and sparse medially and on pleura below; minute, dense and obscure on abdomen basally, becoming more distinct and sparse, but still very fine to fifth tergum, very fine and close on sixth tergum.

Color: Black; wings subhyaline; tegulae, wing nervures, flagella beneath, and spurs dark ferruginous to piceous.

Pubescence: Entirely white on face, cheeks, pleura, propodeum, legs and first two segments of abdomen, the under surfaces of the tarsi ferruginous; white around periphery of mesonotum, but with evident dark pubescence in center of disc and probably on scutellum (which is denuded); vertex with intermixed long pale hairs and shorter black ones; short and black on discs of third to fifth abdominal terga, the sixth with very short erect dark hairs and some very obscure whitish pile; segments 1-5 with entire white apical fasciae; scopa entirely pale yellowish, a few dark hairs on sixth sternum apically.

Holotype, female, No. 5232, Calif. Acad. Sci., Ent. PANAMINT MOUNTAINS, INYO COUNTY, CALIFORNIA, May 29, 1937 (E. C. Van Dyke) at Wild Rose C.C.C. Camp.

#### MEGACHILE (PSEUDOCENTRON) MORIO Smith

This is probably a melanistic form of *M. pruina* Smith. The variety *nigropinguis* Mitchell seems to be intermediate in its color characters between *morio* and typical *pruina*.

#### MEGACHILE (SAYAPIS) INIMICA Cresson

The following notes on the habits of *inimica* as observed at San Antonio, Texas, were received from Mr. H. B. Parks: "This bee was not seen during the last part of June, all of July and until late August, when a few females were captured, while working valley sage (*Salvia ballolaeflora* Benth.) and four males on *Vitex negundo incisa*. These were the only males seen. In September the females were common, collecting both pollen and nectar from *Laciniaria punctata* Kuntze. All through October and up to this date, November 6, the females have worked *Ximenesia encelioides* Cav. abundantly for pollen and nectar. The females made their nests in 'worm holes' in mesquite trees or mesquite fence posts. The holes are lined with circles cut from the leaves of *Monisia pallida* Planch."

#### MEGACHILE (CHELOSTOMOIDES) FELIPIANA Mitchell

The type and only specimen of this species to be recorded previously was collected in San Diego County, California. The following record, therefore, is of the second specimen to be found.

1 ♀, SANTA RITA MOUNTAINS, ARIZONA, May 9, 1937 (W. Benedict).